

Product Specification Sheet

**Pentraxin (PTX3/TSG-14) Antibodies**

Cat. # PTX33-A **Goat** Anti-Human PTX3 protein IgG (aff pure) **SIZE:** 100 ug

Cat. # PTX33-C Recombinant purified Human PTX3 protein control for WB **SIZE:** 100 ul

**Pentraxins** are a family of proteins emerging from genes that are conserved in their carboxy-terminal halves a pentraxin domain and are prototypical acute phase proteins with acquired novel amino-terminal domains. Pentraxins, include C reactive protein (CRP) and Serum Amyloid P component (SAP), which serve as indicators of inflammatory reactions as a result of the exposure of liver cells to cytokines, mainly interleukin-6 (IL-6).

**PTX3 or TSG14 or long pentraxin** (human mature chain 364 aa, chromosome 3q25; ~43 kda ) is structurally related but different form classic pentraxins. PTX3 was clones as an IL-1 inducible gene in endothelial cells, and as TNF-inducible gene in fibroblasts called TSG14. The C-terminal half of PTX3 aligns with CRP and SAP, but the N-terminal half is unique. PTX3 is induced by LPS, IL-1 and TNF-alpha, but not IL-6. During an acute phase response induced by LPS, PTX3 is expressed in many organs (heart, skeletal muscle). PTX3 expression may be indicative of its role in cardiovascular and inflammatory pathology.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Purified recombinant human PTX3 protein
<b>Ab Host/type</b>	Goat, Polyclonal Antibody purified over PTX3-Agarose column, Aff pure IgG (cat # PTX33-A)
<b>2-ab</b>	Rabbit Anti-goat IgG-HRP conjugate Cat # 30220 (AP, biotin, FITC conjugates also available)
<b>-ve control IgG</b>	# 20011-1, Goat (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Human PTX3/TSG14 protein (1-381 aa), containing his-tag at the C-terminus, was expressed in mouse myeloma cell line NSO and purified >90%. Purified protein is ~41 kda (size on SDS-PAGE, reducing ~45-50 kda due to glycosylation). Human PTX3 protein for Western blot +ve control (Cat # PTX33-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of PTX33-C for good visibility with antibody Cat # PTX33-A. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the PTX33-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly

**Form & Storage of Antibodies/Peptide Control**

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20oC and powder at 4oC or -20oC..

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting** (1-3 ug/ml for affinity pure antibody using ECL technique).

**ELISA:** Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.1-1 ug/ml for affinity pure).

**Histochemistry & Immunofluorescence:** Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

**Specificity & Cross-reactivity**

The antibodies recognize human PTX3. There is minimal reactivity with mouse PTX3. Other species not tested. Human PTX3 protein (Cat # PTX33-C) can be used positive control.

**General References:** Andrea basile et al, (1997) JBC vol 272, No: 13, 8172-8178; Kamyar Zahedi et al (1997) JBC, Vol 272, No: 4, 2143-2148; Martino Introna et al (1996) Blood, Vol 87, No: 5 , 1868-1872; Giuseppe Peri et al (2000) Circulation, Vol 102, 636-641.

\*This product is for In vitro research use only.

**Some New Antibodies from ADI...**

PTX1-3 antibodies and proteins  
CRP antibodies and ELISA kits  
Recombinant human and mouse PTX3 (TSG-14) proteins

PTX33-A-P

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